

Task List Floc Size Measurement

Fall 2013

Tiago Viegas

Done by September 20th

- Contact Edmunds Optics for camera and lenses research
- Contact Todd for advice on practical application of image taking
- Begin designing flow cell and calculations of laminar flow through cell

Done by September 27th

- Complete research about lenses and camera options
- Design mount system for camera and flow cell
- Purchase camera that will work with our application
- LabVIEW learning throughout the month

Done by October 4th

- Finish calculations and order material for the flow cell
- LabVIEW already beginning to be implemented

Done by October 11th

- Build flow cell and mount
- First test measurements made with camera and flow cell. Use polystyrene beads on initial tests.

Done by October 18th

- Improvements and corrections in image taking after initial tests
- Begin to measure sizes with images taken and make software adjustments

Done by October 25th

- Test with different sizes of beads to test the systems ability to measure different sizes
- Characterize the error in the system

Done by November 1

- Connect system to experimental setup (possibly the sedimentation tank) and test performance

Done by November 8

- Determine necessary adjustments for turbulent flow
- Test system design under turbulent flow conditions

Done by November 15 - ??

Done by November 22 - ??